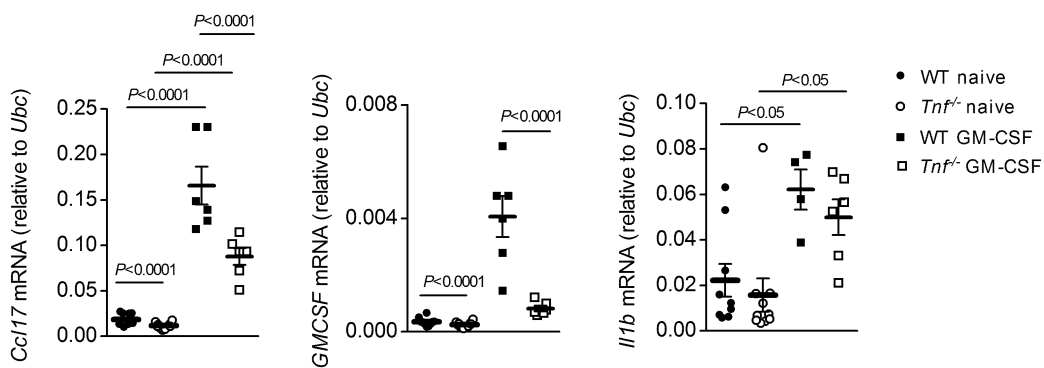


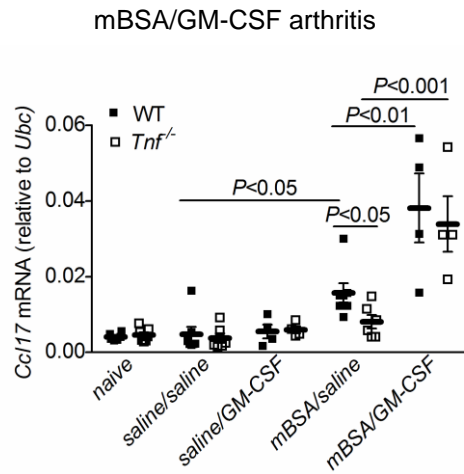
Supplemental Figure 1. TNF is required for CFA-induced inflammatory pain.

(**A-B**) WT and *Tnf*^{-/-} mice received an intraplantar (i.pl.) injection of Complete Freund's Adjuvant (CFA) and (**A**) pain (incapacitance meter) and (**B**) footpad swelling (calipers) were measured (n=10 per group). Results are shown as mean \pm SEM. P values were obtained using a 2-way ANOVA test. * p<0.05, ** p<0.01, **** p<0.0001, WT vs. *Tnf*^{-/-} mice.

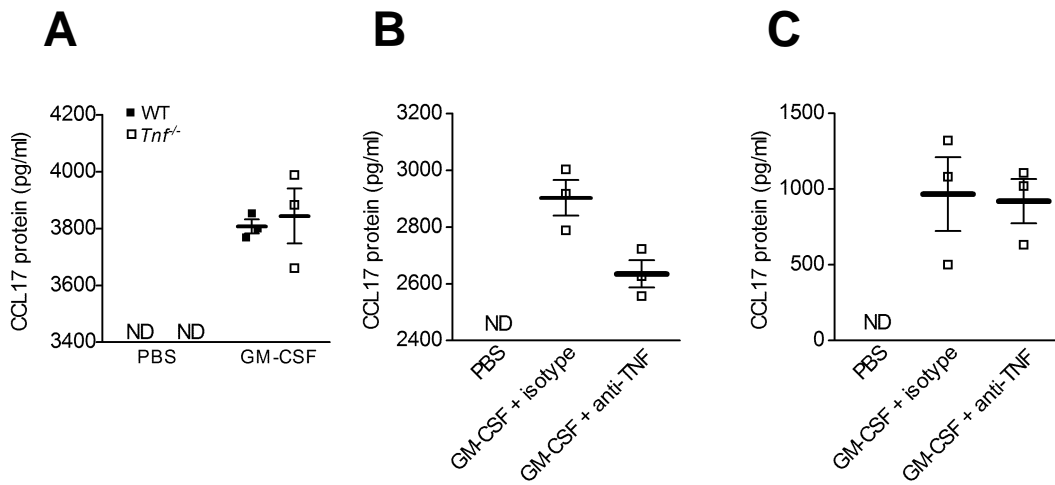


Supplemental Figure 2. TNF dependence of cytokine gene expression upon GM-CSF administration.

Ccl17, *GM-CSF* and *Il1b* mRNA expression (qPCR) in the naïve hind footpad and 4 hrs post intraplantar (i.pl.) injection of GM-CSF (20 ng) (n=4-10 mice/group) from WT and *Tnf*^{-/-} mice. Results are shown as mean ± SEM. P values were obtained using a t-test.

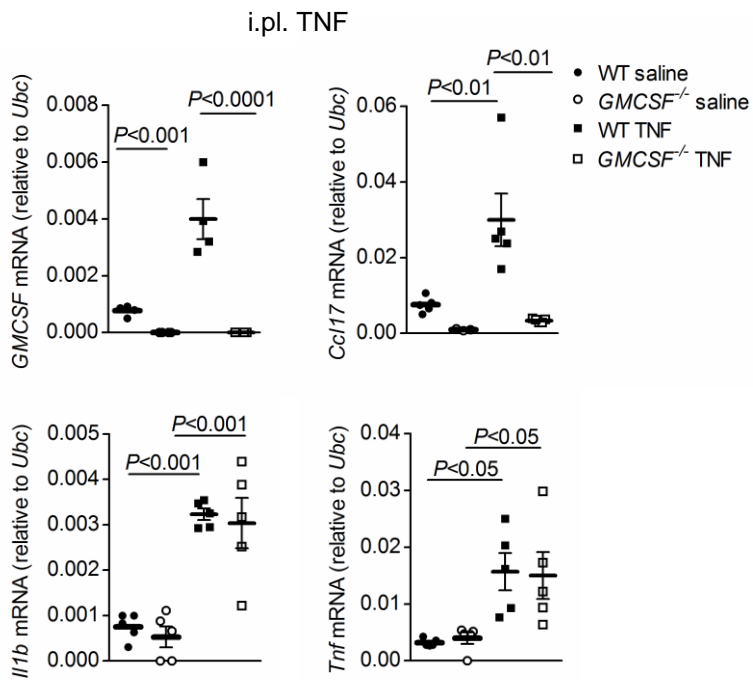


Supplemental Figure 3. TNF dependence of *Ccl17* gene expression in joints. Methylated BSA (mBSA)/GM-CSF arthritis (mBSA intra-articular (i.a.) [day 0] and GM-CSF or saline s.c. [days 0-2]) was induced in WT mice and *Ccl17* mRNA expression in the knee joint (i.a. injection/s.c. injection) (day 7) was measured (n=4-6 mice/group). Results are shown as mean \pm SEM. P values were obtained using a 2-way ANOVA.



Supplemental Figure 4. GM-CSF induced CCL17 production in murine monocytes/macrophages is TNF independent.

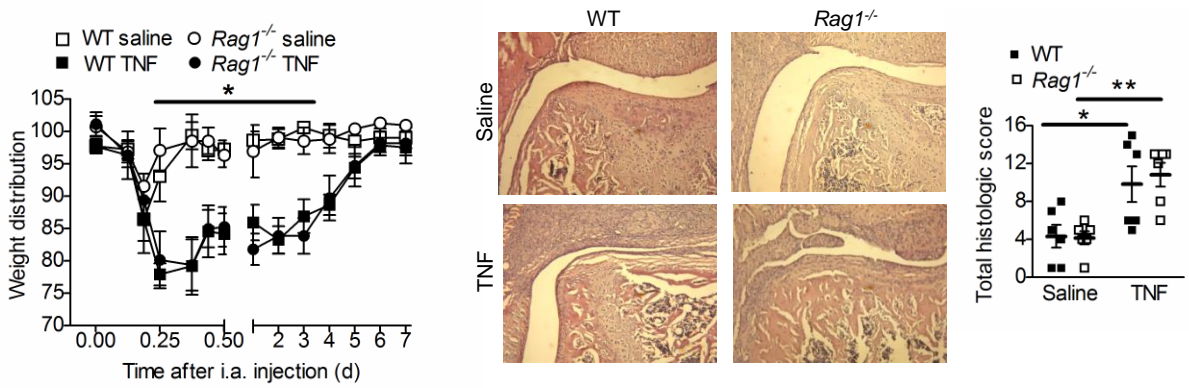
In vitro GM-CSF- (20 ng/ml) or PBS-stimulated (24 hours) Ccl17 secreted protein levels from (A) WT and *Tnf*^{-/-} murine thioglycolate-elicited peritoneal macrophages, (B) WT murine thioglycolate-elicited peritoneal macrophages and (C) WT murine sorted CD115⁺CD11b⁺ bone marrow monocytes. For (B and C) the in vitro stimulation was performed in the presence of anti-TNF mAb or IgG1 isotype control (1 ng/ml, t=0 hours). ND = not detected.



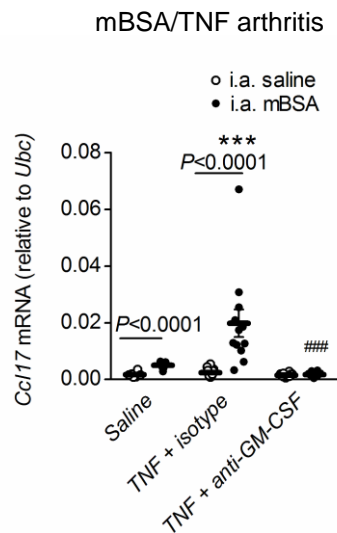
Supplemental Figure 5. Granulocyte macrophage-colony stimulating factor (GM-CSF) dependence of cytokine gene expression upon TNF administration.

GM-CSF, *Ccl17*, *Il1b* and *Tnf* mRNA expression (qPCR) in the hind footpad 4 hrs post intraplantar (i.pl.) injection of TNF (20 ng) or saline (n=5-10 mice/group) from WT and *GM-CSF*^{-/-} mice. Results are shown as mean \pm SEM. P values were obtained using a 2-way ANOVA test.

mBSA/TNF arthritis

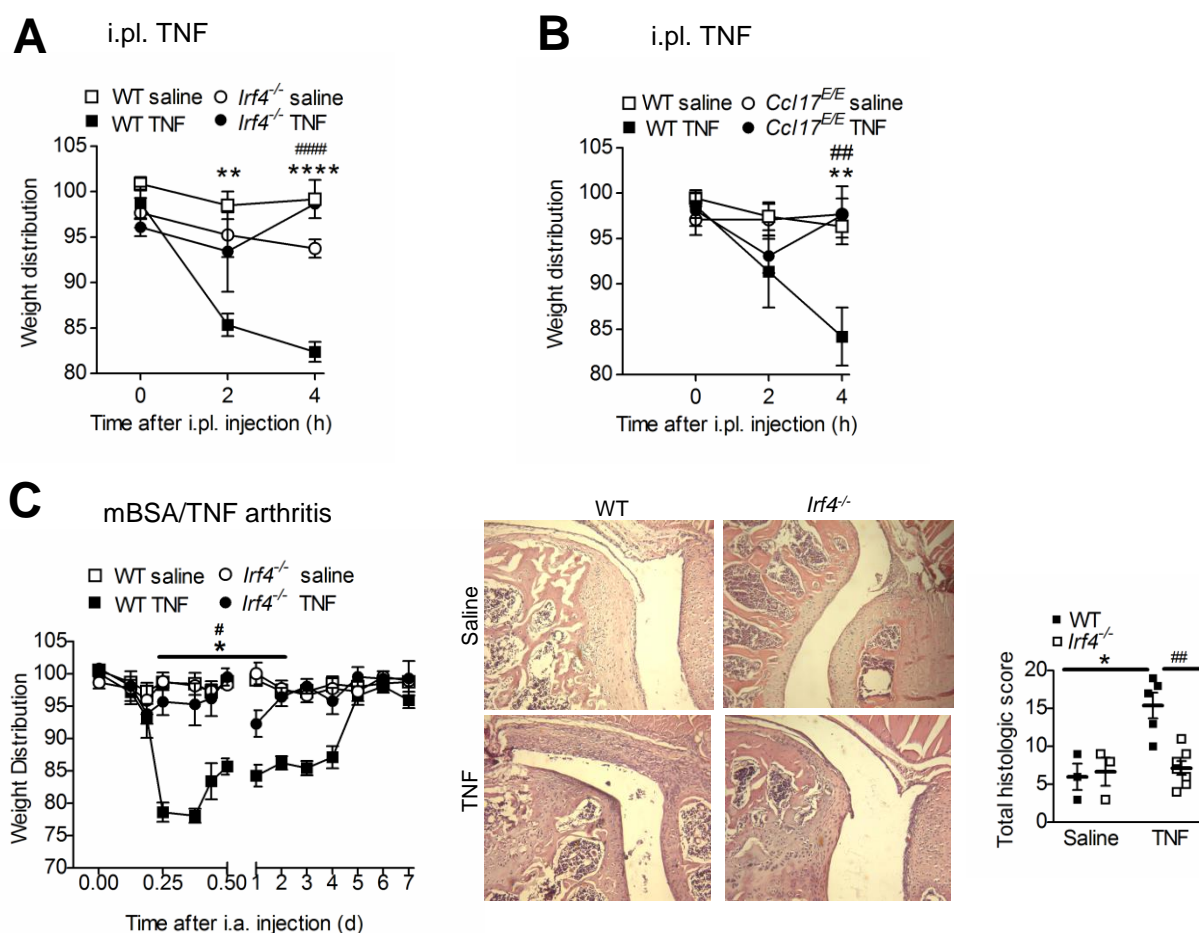


Supplemental Figure 6. TNF-driven arthritic pain and disease are lymphocyte independent. Methylated BSA (mBSA)/TNF arthritis (mBSA i.a. [day 0] and TNF or saline s.c. [days 0-2]) was induced in WT and *Rag1*^{-/-} mice (n=6 mice/group). Pain and arthritis (histology) were measured. Original magnification x125. Results are shown as mean ± SEM. P values were obtained using a 2-way ANOVA test for pain (weight distribution) readings, and a 2-way ANOVA test for histology quantification. * p<0.05, ** p<0.01, WT saline vs. WT TNF, *Rag1*^{-/-} saline vs. *Rag1*^{-/-} TNF.



Supplemental Figure 7. GM-CSF dependence of *Ccl17* gene expression in methylated BSA/TNF arthritis.

Methylated BSA (mBSA)/TNF arthritis (mBSA i.a. [day 0] and TNF or saline s.c. [days 0-2]) was induced in WT mice treated prophylactically with anti-GM-CSF mAb or isotype control (150 μ g i.p. on days -2 and 0 i.p.). *Ccl17* mRNA expression (day 4) was measured in i.a. saline- and i.a. mBSA-injected joints (n=8-12 joints/group). Results are shown as mean \pm SEM. P values were obtained using a t-test. *** p<0.001, saline vs. TNF + isotype. ### p<0.001, TNF + isotype vs. TNF + anti-GM-CSF.



Supplemental Figure 8. Interferon regulatory factor 4 (IRF4) and CCL17 are required for TNF-driven inflammatory pain and IRF4 is required for TNF-driven arthritic pain and disease. (A and B) intraplantar (i.pl.) injection of TNF (20 ng) or saline in (A) WT and *Irf4*^{-/-} mice (n=4-6 mice/group) and (B) WT and *Ccl17*^{E/E} mice (n=4-5 mice/group). Pain was measured. (C) methylated BSA (mBSA)/TNF arthritis (mBSA i.a. [day 0] and TNF or saline s.c. [days 0-2]) was induced in WT and *Irf4*^{-/-} mice (n=4-7 mice/group). Pain and arthritis (histology) were measured. Original magnification x125. Results are shown as mean \pm SEM. P values were obtained using a 2-way ANOVA test for pain and a 2-way ANOVA test for histology quantification (C). * p<0.05, ** p<0.01, **** p<0.0001, WT saline vs. WT TNF; # p<0.05, ## p<0.01, #### p<0.0001, WT TNF vs. *Irf4*^{-/-} TNF or *Ccl17*^{E/E} TNF.